

WHAT IS CLAIMED IS:

1. An ink jet head comprising:

a plurality of grooves each connected to a nozzle aperture;

a common ink chamber to which each of the grooves is connected;

ink storing means for storing ink;

an ink flow path that connects the common ink chamber and the ink storing means to each other; and

a filter that is disposed in a portion of the ink flow path,

wherein:

thin plate shaped spaces are defined in an upstream side and a downstream side by forming mutually opposing partitions before and after the filter in the flow path;

in the upstream space of the upstream side, a thin plate shaped ink introduction passage is connected to one end side of the filter in a directional orthogonal to the direction in which the grooves of the filter are arranged in parallel, extending over the direction in which the grooves are arranged in parallel;

in the downstream space of the downstream side, a thin plate shaped ink supply passage for supplying ink to the common ink chamber is connected to the other end side of the filter, extending over the direction in which the grooves are arranged in

parallel;

one end side of a tubular communicating passage, of which the other end is connected to the ink storing means, is connected to a side opposite to that of the upstream space of the ink introduction passage; and

dimensions of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space in a thickness direction of the thin plate shaped spaces are each smaller than an inner diameter of the communicating passage.

2. An ink jet head according to claim 1, wherein:

the filter is disposed in a vertical direction;

the ink introduction passage is connected to a lower portion side in a vertical direction of the upstream space; and

the ink supply passage is connected to an upper portion side in a vertical direction.

3. An ink jet head according to claim 1, wherein:

the filter is disposed in a horizontal direction;

the upstream space is defined on a lower side in a vertical direction of the filter; and

the downstream space is defined on an upper side in a vertical direction of the filter.

4. An ink jet head according to claim 1, wherein:

the dimensions of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space in the thickness direction of the thin plate shaped spaces are substantially identical to one another.

5. An ink jet head according to claim 1, wherein:

the dimensions of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space in the thickness direction of the thin plate shaped spaces are each equal to or less than 1.0 mm.

6. An ink jet head according to claim 1, wherein:

the ink supply passage is connected to the common ink chamber with one end side, opposite to the other end side that is connected to the downstream space, so as to be inclined downward in the vertical direction by a predetermined amount.

7. An ink jet recording apparatus provided with the ink jet head according to claim 1.